Pediatric OSAS with ADHD -A Case Report

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Introduction

In previous studies, attention deficit and hyperactivity disorder and OSAS were reported associated and the influences between the diseases were bidirectional. In several studies, progressive hypoxia or fragmentation of sleep may deteriorate ADHD, and vice versa. OSAS is easily missed in children with ADHD, especially in those without other risk factors for OSAS. Here we reported on a 6-year-old slender boy with a BMI of 16.6 kg/m², who was diagnosed of ADHD and pediatric OSA.

Case report

Here we reported on a 6-year-old slender boy with a BMI of 16.6kg/m². He had no other systemic disease before. The initial presentation was difficulty concentrating at home and at school, fidgetiness and restlessness. The patient also reported daytime tiredness and but his ESS scored 7. The physical examination showed a narrowing of upper airway, grade III tonsil, and FTP 2. Under nasopharyngoscopy, bilateral inferior turbinates hypertrophy and nasopharyngeal adenoid hypertrophy were noted. In the polysomnography examination, multiple episodes of EEG arousal was noted (EEG arousal index 31.9/hour). Moderate obstructive sleep apnea (AHI: 7.4/hour) with nadir oxygen saturation 88% was impressed. Multi-displinaryevaluation was suggested, including paediatrist, psychiatrist, ENT, orthodontist. Follow-up and repeated PSG was also indicated. The patient received adenoidectomy and tonsillectomy on April 18th, 2022 and recovered well. 5 months later on August 18th, 2022, the patient received repeated PSG and the AHI was lowered down to 0.6/hour. The patient's ADHD related symptoms improved compared with 5 months ago.

Conclusion

Attention deficit and hyperactivity disorder and OSAS were reported associated and the influences between the diseases were bidirectional. Patients with ADHD combined with OSAS shold be referred to Multi-displinary evaluation and treatment.

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中文題目: 注意力不足及過動症合併睡眠呼吸中止症的共病——個案報告

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